

Biostimulatory Substances

Water shall not contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.

Chemical Constituents

Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. The chemical constituent objectives in Table III-1 apply to the water bodies specified. Metal objectives in the table are dissolved concentrations. Selenium, molybdenum, and boron objectives are total concentrations. Water quality objectives are also contained in the Water Quality Control Plan for Salinity, adopted by the State Water Board in May 1991.

At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain

concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To protect all beneficial uses the Regional Water Board may apply limits more stringent than MCLs.

TABLE III-1
TRACE ELEMENT WATER QUALITY OBJECTIVES

CONSTITUENT	MAXIMUM CONCENTRATION ^a (mg/l)	APPLICABLE WATER BODIES
Arsenic	0.01	Sacramento River from Keswick Dam to the I Street Bridge at City of Sacramento (13, 30); American River from Folsom Dam to the Sacramento River (51); Folsom Lake (50); and the Sacramento-San Joaquin Delta.
Barium	0.1	As noted above for Arsenic.
Boron	2.0 (15 March through 15 September) 0.8 (monthly mean, 15 March through 15 September) 2.6 (16 September through 14 March) 1.0 (monthly mean, 16 September through 14 March) 1.3 (monthly mean, critical year ^b)	San Joaquin River, mouth of the Merced River to Vernalis
Cadmium	0.00022 ^c	Sacramento River and its tributaries above State Hwy 32 bridge at Hamilton City
Copper	0.0056 ^c 0.01 ^d	As noted above for Cadmium. As noted above for Arsenic. ^d
Cyanide	0.01	As noted above for Arsenic.

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WATER QUALITY OBJECTIVES

TABLE III-1 TRACE ELEMENT
WATER QUALITY OBJECTIVES
(Continued)

CONSTITUENT	MAXIMUM CONCENTRATION ^a (mg/l)	APPLICABLE WATER BODIES
Iron	0.3	As noted above for Arsenic.
Manganese	0.05	As noted above for Arsenic.
Molybdenum	0.015	San Joaquin River, mouth of the Merced River to Vernalis
	0.010 (monthly mean)	
	0.050	Salt Slough, Mud Slough (north), San Joaquin River from Sack Dam to the mouth of Merced River
	0.019 (monthly mean)	
Selenium	0.012	San Joaquin River, mouth of the Merced River to Vernalis
	0.005 (4-day average)	
	0.020	Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of Merced River
	0.005 (4-day average)	
	0.020	Salt Slough and constructed and re-constructed water supply channels in the Grassland watershed listed in Appendix 40.
	0.002 (monthly mean)	
Silver	0.01	As noted above for Arsenic.
Zinc	0.1 ^d	As noted above for Arsenic. ^d
	0.016 ^c	As noted above for Cadmium.

a Metal objectives in this table are dissolved concentrations. Selenium, molybdenum, and boron objectives are total concentrations.

b See Table IV-3.

c The effects of these concentrations were measured by exposing test organisms to dissolved aqueous solutions of 40 mg/l hardness that had been filtered through a 0.45 micron membrane filter. Where deviations from 40 mg/l of water hardness occur, the objectives, in mg/l, shall be determined using the following formulas:

$$Cu = c (0.905) (\ln \text{ hardness}) - 1.612 \times 10^{-3}$$

$$Zn = c (0.830) (\ln \text{ hardness}) - 0.289 \times 10^{-3}$$

$$Cd = c (1.160) (\ln \text{ hardness}) - 5.777 \times 10^{-3}$$

d Does not apply to Sacramento River above State Hwy. 32 bridge at Hamilton City. See relevant objectives (*) above.